

Claims

[c0001] 1. A fuel conditioning device comprising:

at least one magnet having a lower side longitudinally disposed adjacent a fuel line, said magnet operatively arranged to induce a magnetic field proximate said fuel line;

at least one metal plate disposed near an upper side of said magnet; and,

means for securing said magnet and said metal plate to said fuel line.

[c0002] 2. The fuel conditioning device of Claim 1 further comprising a protective shield for covering said at least one magnet and said at least one metal plate.

[c0003] 3. The fuel conditioning device of Claim 2 wherein said protective shield is selected from a member of the group consisting of rubber and plastic.

[c0004] 4. The fuel conditioning device of Claim 3 wherein said protective shield further comprises said means for securing said device to said fuel line.

[c0005] 5. The fuel conditioning device of Claim 1 wherein said securing means comprises at least one strap.

[c0006] 6. The fuel conditioning device of Claim 1 wherein said magnet comprises a magnetic field strength of at least 2,000 gauss.

[c0007] 7. The fuel conditioning device of Claim 1 wherein said magnet and said metal plate are of approximate size and shape such that substantial registration exists between the upper surface of said magnet and a planar surface of said metal plate.

[c0008] 8. The fuel conditioning device of Claim 1 wherein said lower side of said magnet comprises the south pole of said magnet.

[c0009] 9. The fuel conditioning device of Claim 1 operatively arranged to be secured to the fuel line of an internal combustion engine.

[c0010] 10. The fuel conditioning device of Claim 1 comprising:
at least two magnets; and,
at least two metal plates;
said at least two magnets comprising first and second magnets each associated with one of said at least two metal plates; each of said at least two metal plates near an upper side of said first and second magnets, said first and second magnets and associated metal plates longitudinally disposed adjacent said fuel line and one an-

other; said first magnet disposed toward a fuel distribution means such that its south pole is adjacent said fuel line and said second magnet disposed toward a fuel source such that its north pole is adjacent said fuel line.

[c0011] 11. The fuel conditioning device of Claim 1 comprising:
at least four magnets; and,
at least two metal plates;
said at least four magnets comprising first, second, third and fourth magnets; said third and fourth magnets each associated with one of said two metal plates; said metal plates near an upper side of said third and fourth magnets, said third and fourth magnets each in magnetic attractive registerable contact with said first and second magnets, respectively; said first magnet disposed toward a fuel distribution means such that its south pole is adjacent said fuel line and said second magnet is disposed toward a fuel source such that its north pole is adjacent said fuel line.

[c0012] 12. A fuel conditioning device for attaching to a fuel line conveying fuel from a fuel source to a fuel distribution means, said fuel conditioning device comprising at least one magnet assembly; said magnet assembly comprising:
at least one magnet having a lower side disposed adjacent a longitudinal portion of said fuel line;

at least one metal plate disposed near an upper side of said magnet; and,

at least one shield substantially surrounding said at least one magnet, said at least one metal plate, and said longitudinal portion of said fuel line; said shield defining a cavity for receiving said magnet and said metal plate.

[c0013] 13. The fuel conditioning system of Claim 12 comprising a second magnet assembly, said first magnet assembly disposed toward said fuel distribution means such that its south pole is adjacent said fuel line and said second magnet assembly disposed toward a fuel source such that its north pole is adjacent said fuel line.

[c0014] 14. A fuel conditioning device for attaching to a fuel line conveying fuel from a fuel source to a fuel distribution means, said fuel conditioning device comprising at least a first double magnet assembly; said first double magnet assembly comprising:

a first magnet having a lower side disposed adjacent a longitudinal portion of the fuel line to provide a magnetic field proximate said fuel line;

a second magnet disposed on top of said first magnet in magnetic attraction therewith

at least one metal plate disposed near an upper side of said second magnet; and,

at least one shield substantially surrounding said first

and second magnets, said at least one metal plate and said longitudinal portion of said fuel line; said shield defining a cavity for receiving said first and second magnets and said metal plate.

[c0015] 15. The fuel conditioning device of Claim 14 wherein said lower side of said first magnet of said first double magnet assembly is disposed toward said fuel distribution means such that its south pole is adjacent said fuel line.

[c0016] 16. The fuel conditioning device of Claim 15 comprising a second double magnet assembly, said first and second double magnet assemblies longitudinally adjacent one another on said fuel line such that said second double magnet assembly is disposed toward a fuel source and said first double magnet assembly is disposed toward said fuel distribution means.

[c0017] 17. The fuel conditioning device of Claim 16 wherein said lower side of said first magnet of said second double magnet assembly is disposed such that its north pole is adjacent said fuel line.

[c0018] 18. The fuel conditioning device of Claim 1 further comprising a focusing bar disposed adjacent said fuel line on the side of said fuel line opposite said magnet.

